The Air Line Pilot

January, 1954

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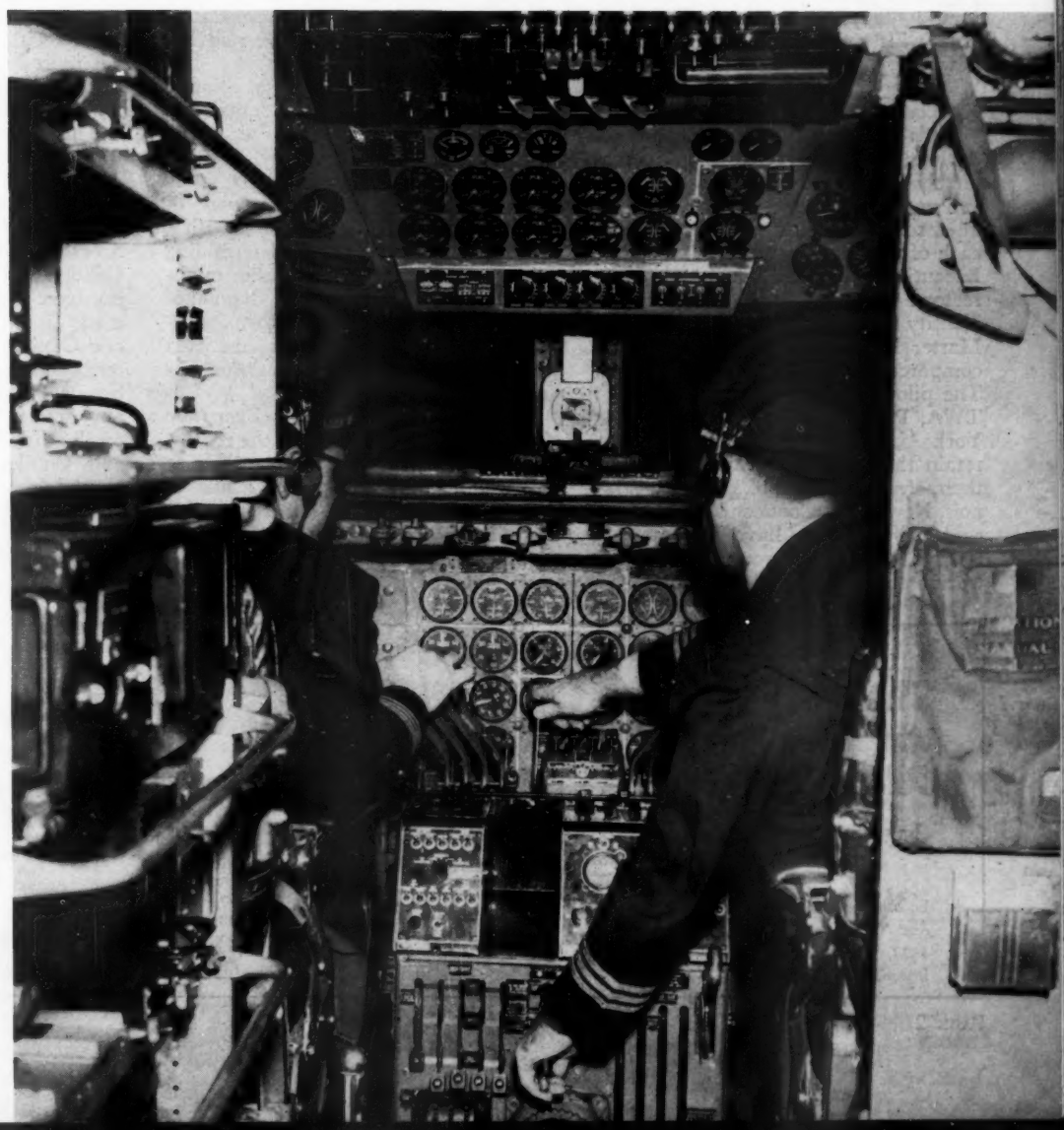

The Unforgotten Man
—Page 6—

The Organization and Operation Of ALPA--Functional Democracy

From Its Basic LEC Unit to the Home Office ALPA'S Organizational Structure is Geared to but One Thing—True Pilot Representation.

By Scruggs Colvin

I am often asked by pilots relative to Association activities; "What are they doing about this?", and I have wondered just who "they" are. When asked who the member means by "they," it often turns out to be that he doesn't quite know. But it's evident it must be somebody because correspondence is received, policies formulated, and employment agreements negotiated. This mystic "they" has prompted this article with a view toward explaining how "they" follow the ALPA motto of "Get the job done," in regard to the Association's organization.

Let's examine the organization of ALPA to see what it really is. To completely understand ALPA organization, you must first realize that ALPA is the all-encompassing name for the pilots of each of the air lines represented on the Executive Board and the Board of Directors. Each air line maintains its identity through its Local Councils and Master Executive Council. It can be compared to our own United States. The pilot group of each air line, from TWA, PAA, EAL, UAL, AA to New York Airways, Caribair, and Pioneer, retain their basic identity and govern themselves regardless of size (as do Illinois, New York, Connecticut, etc.), except where they have relinquished rights to the entire group for administration to their mutual benefit.

The authority and power of the Association is retained in the membership of the respective air line, who voice their opinions through their elected representatives on the Local Councils and the Master Executive Councils. Thus the pilots of the individual air lines retain the legislative authority but have established the Home Office to administer their mandates and policies. The Home Office is the administrative body, serves as liaison agent, and implements overall policy.

The basic unit of the Association is the Local Council. Local Councils are established on individual air lines whenever the domicile reaches the size where it can no longer be adequately represented by a contact man who coordinates the domicile activities with a larger council. To aid in determining whether a council should be established, the Master Executive Council of that air line must first approve its establishment with primary consideration given to better pilot representation, coordinated system wide.

If approved, the Master Executive Council Chairman forwards the recommendation to the ALPA Home Office where it is included on the agenda of the next regular Executive Committee Meeting.

The ALPA Executive Committee then reviews the Master Executive Council's recommendation. In addition, it considers the dollar cost involved, which includes not only the Local Council operation, but the added Master Executive Council and Board of Directors' expenses. Of equal importance is the consideration of proportional representation by the Local Council officers in comparison with other air lines of comparable structure. The Local Council is primarily concerned with problems of a local nature, yet must have some method of co-ordinating local problems that affect the air line system-wide.

The next organizational step is the Master Executive Council. The MEC is automatically composed of the Chairman and Senior Copilot Representative from each Local Council. Officers elected by the Master Executive Council members are the Master Executive Council Chairman, Vice Chairman, Senior Copilot Representative and Copilot Representative. The Master Executive Council Chairman and Senior Copilot Representative can be any active member in good standing on the air line, but the Vice Chairman and Copilot Representative must be elected from the members of the Master Executive Council. The Master Executive Council has no set meeting date, but must convene at least three times yearly. It functions as a co-or-

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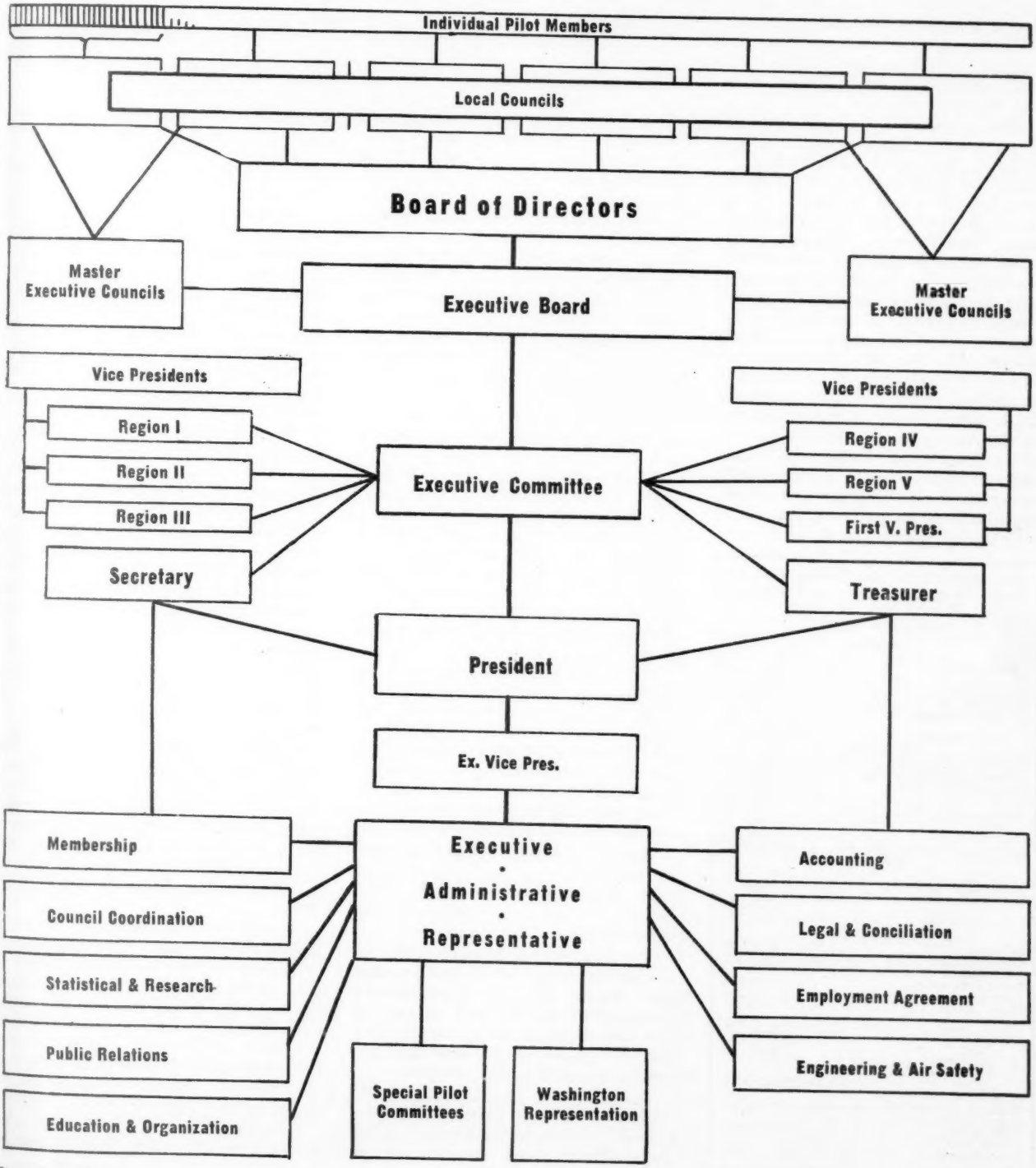
Ed Modes, Editor

dinating body for the membership of its respective air line and has the authority to make the final decision on any problem, or problems of the pilots on that air line, except as otherwise provided in the ALPA Constitution and By-Laws. The Master Executive Council can not request any action that is inconsistent with the Constitution and By-Laws or with the best interest of the Association or its general membership.

We now have provided for ALPA structure to handle the local problems in each Council and those system wide on an air line. The next consideration is co-ordination of the Association in its entirety, when necessary, during the period between conventions.

The Executive Board is composed of the Chairman and Senior Copilot Representative from each Master Executive Council of each air line. The Executive Board doesn't hold regular



meetings. However, it may be convened at any time by the Association President, the Executive Committee, or if thirty per cent of the Executive Board members request the President to convene it. The Executive Board has the power and authority to control the Association, its general management and business affairs. It is, then, a representing body that is also administrative; however, it does not have the authority to change the By-Laws, but can make such recommendations to the Board of Directors.

We mentioned the Executive Committee and its relation to the individual air lines. The Executive Committee is composed of the Association President, First Vice-President, Secretary, Treasurer and the five Regional Vice-Presidents. The Executive Committee acts in consultation and cooperation with the President in furthering the objectives and policies announced by the Executive Board and the Board of Directors. It makes recommendations of policy to the Executive Board and the Board of Directors. The Executive Committee is charged with maintaining continuity in the pilot management of the Association, general trusteeship of the Association's business and funds and acts in the capacity of owners' representatives. It determines the basic organizational structure of the Home Office and the Regional offices and ratifies the President's selection of staff members and department heads. In short, the Executive Committee is the immediate pilot administrative body of the Association.

I have repeatedly mentioned the Board of Directors. By now, you probably feel that it is some mystic body and that no one quite knows how it came into being. Actually, it is automatically composed of the Chairman and Senior Copilot Representative from each Local Council in the Association. Thus the basic operating unit —the Local Council—is, through its officers, the highest governing body of the Association. It is vested with the control of the Association, its general management and business affairs. Its decision—whether in session or by mail ballot—is the final governing decision of the Association and is binding on the Association, the Executive Board, the Executive Committee, the officers and the membership.

The Board of Directors meet regularly each two years some time between Oct. 2nd and Nov. 30th upon a date set by the Executive Committee. If the Executive Committee feels that the date should be changed, it can do so only by balloting the Board of Directors and securing their approval. Provision has been written into the By-Laws to permit the Board of Directors to be called into session for a special meeting. Special meetings may be called at any time by the Executive Committee, the Executive Board, or by the President. One additional method is provided for convening the Board of Directors. Thirty per cent of the active Association membership can petition the Association secretary to ballot the entire membership by mail ballot, clearly stating the issues involved upon which the petitioners desire that the Board of Directors be convened. We have now outlined the basic operating structure of the Association which in summary is:

The Local Council, the foundation of the Association. It is composed of pilots of one air line at a specific domicile, and is primarily concerned with administration of local activities.

The Master Executive Council, automatically composed of the Chairman and Senior Copilot Representative from each Local Council on one air line and charged with co-ordination and administration of their air line problems system wide.

The Executive Board, automatically composed of the Master Executive Council Chairman and Senior Copilot Representative from each of the air lines and having the power and authority to control the Association, its general management and business affairs, subject to final review by the Board of Directors.

The Executive Committee, composed of the President, First Vice-President, Secretary, Treasurer, and the five Regional Vice-Presidents. It acts in consultation and cooperation with the President in furthering the objectives and policies of the Association. It can recommend policy to the Board of Directors but cannot make policy.

The Board of Directors is composed of the Chairman and Senior Copilot Representative from each Local Council. It is the highest governing body in the Association and its decisions are final.

We have reviewed the representative structure of ALPA to show the machinery available to handle local, system-wide and Association-wide problems. The next organizational step is that of administration of the Association policies and mandates to insure uniformity of action. The Home Office at 55th Street and Cicero Avenue, Chicago, Illinois, provides the necessary administration.

The Association President is its administrative and executive head. He supervises the affairs and managerial duties of the Association. He is responsible for carrying out the policies of the Board of Directors, the Executive Board and the Executive Committee. He works closely with the Executive Committee. He has the assistance of the officers of the Association, the Executive Vice-President and other necessary administrative assistance. In carrying out his duties, the President has, by Board of Directors approval, the assistance of the following officers, departments and personnel:

First Vice-President: He is an active ALPA member in good standing, nominated and elected by the Board of Directors in Convention for a two-year term of office. He receives no salary for serving as a member of the Executive Committee or as the agent for the Executive Committee or the Home Office.

The First Vice-President functions under the direction of the Association President and the Executive Committee. In the event the office of President is vacated for any reason, the First Vice-President becomes the Acting President and calls a special meeting of the Board of Directors to nominate and elect a President for the unexpired term of office.

Secretary: The Secretary must also be an active member in good standing.

Air Line Pilots Association Federal Credit Union Financial and Statistical Report Nov. 30, 1953

BALANCE SHEET

Assets

	Nov., 1953
Loans (687)	$ 427,142.41
Cash	215,174.97
U. S. Bonds	443,638.31
Furniture & Fixtures	2,316.36
Prepaid Expense & Misc.	379.62
Total	$1,088,651.67

Liabilities

Shares	$1,050,341.63
Reserve for Bad Loans	12,018.23
Undivided Profits	2,681.04
Profit	23,401.91
Accounts Payable	208.86
Total	$1,088,651.67

STATEMENT OF INCOME & EXPENSE

Income

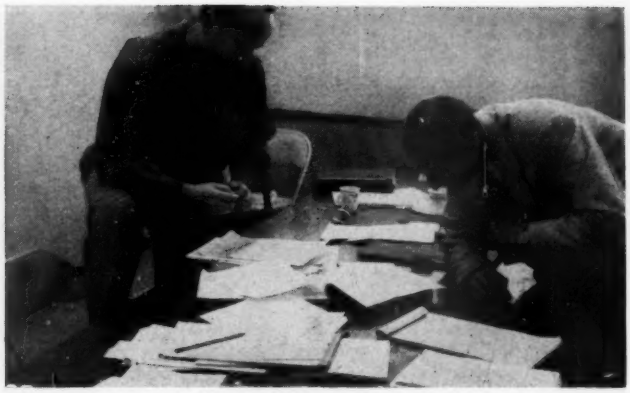
	Nov., 1953
Interest on Loans	$3,596.72
Investment Income	0
Total	$3,596.72

Expenses

Salaries	$1,031.95
Office Expense	69.87
Educational Expense	0
Loan Insurance	310.08
Depreciation	62.72
Misc.	385.15
Total	$1,859.77
Net Profit	$1,736.95

Statistical Information

	Nov., 1953
Number of Members	2,466
Number of Potential Members	10,865
Loans Made Since Organization (Number)	2,663
Loans Made Since Organization (Amount)	$1,898,298.40



While pilots thresh out their own problems, the Home Office stands ready to lend a helping administrative hand with personnel, information, and other facilities. These are scenes during a recent meeting of the AA MEC at the Home Office.

He, too, is nominated and elected by the Board of Directors in Convention for a two-year term of office. He serves without salary and is also a member of the Executive Committee to which he is held responsible. His duties are to keep the records and correspondence of the Association. This includes keeping the minutes of the meetings of the Executive Committee, Executive Board, and Board of Directors. He is custodian of the Association seal, which he affixes when required. It falls to him to keep the Association membership records and all pertinent information concerning membership up to date at all times. All Association membership cards bear his signature.

Treasurer: The Treasurer's office is filled by an active member with the requirement of good standing. He is nominated and elected for a two-year term by the Board of Directors in Convention. He receives no remuneration. Like other ALPA officers, he is a member of the Executive Committee.

The duties of the Treasurer encompass the general financial and fiscal administration of the organization and affiliated financial matters including the efficient administration of all financial and fiscal policies and the care and safeguarding of all Association funds and securities. He sees that a thorough financial audit of the Association books is made each year and submitted to the Board of Directors. Actually, it is done every three months. He submits a quarterly financial report to the members, through their Local Executive Council, and prepares an annual budget which is submitted to the Executive Committee. Another prime responsibility is that of building up and maintaining satisfactory reserves. These reserves may be kept in the form of interest bearing securities, stocks, or bonds.

Executive Vice-President: Active pilot members of the Association, in good standing, are eligible to hold the office of Executive Vice-President provided that the Board of Directors in attendance at a Convention may, by a two-thirds (⅔) vote, declare anyone eligible to hold the office.

The Board of Directors in Convention nominate the candidates for the office of Executive Vice-President and the President appoints an Executive Vice-President from among the candidates. The Executive Vice-President's term of office continues until he vacates the office for any reason or is removed by the President, subject to review and hearing by the Executive Committee, if such action is requested within fifteen (15) days. The Executive Committee, in turn, must report to the next meeting of the Executive Board or Board of Directors the reasons for its actions. The Executive Vice-President is paid a salary set by the President subject to the approval of the Executive Committee.

Regional Vice-Presidents: The five Regional Vice-Presidents are elected from among the active membership in their respective geographical region.

In Constant Memoriam

Due to an error in compilation, the "In Constant Memoriam" column appearing in the December issue of THE AIR LINE PILOT omitted the names of ALPA's late Treasurer, R. G. Strait (TWA), and Capt. Milo Campbell (TWA). The Air Line Pilot deeply regrets these errors and apologizes for the omissions. The Air Line Pilot is endeavoring to bring this list, which runs once each year, correctly up to date and will be grateful for any other mistakes called to its attention.

Candidates are nominated by the regional Local Councils and each active member in the region votes for his selection of a Vice-President and alternate by secret ballot. The term of office is two and one-half years and the elections are staggered so that one region holds an election every six months. The Regional Vice-Presidents, in addition to their Executive Committee duties, represent the Association in their respective regions in furthering and implementing the objectives and policies of the Board of Directors, Executive Board, and Executive Committee. Additionally, they render presidential assistance whenever and however necessary.

The Home Office is the administrative center for the pilots of all the air lines. It houses the Association's salaried staff who are administratively responsible to the President in implementing the mandates of the Board of Directors, Executive Board and Executive Committee. For simplicity of administration, the Home Office structure has three primary divisions: Executive, Administrative and Representative.

The Executive division is composed of the elected Association officers who have been charged by the membership to promote the interests of the air line piloting profession and to safeguard the rights, individually and collectively, of the Association members.

Assisting the Executive division are the Representatives and Administrative divisions.

The Representative division is composed of the following departments whose duties and objectives are allied in purpose. These departments and their functions are:

Employment Agreements: To establish fair rates of compensation, maxi-

(Continued on Page 14)

By
John Newland

Reprinted from
Boeing Magazine

The Unforgotten

What I ha' seen since ocean-steam began
Leaves me na doot for the machine;
but what about the man?

—RUDYARD KIPLING

Crew stations must be designed to accommodate tallest and shortest of airmen. These tall and short SAC flyers helped test merits of B-52 in mock-up.

Recently a designer planned a crew station for a new and complex airplane. There was a great number of necessary instruments and gadgets and controls to be installed. The designer saw to it that they were included in the aircraft. When flight tests and crew performance tests were being carried out, however, it was discovered that the crewman at one particular station would have to work 90 minutes every hour to carry out his required duties.

This situation is not as ludicrous as it may sound. It is the sort of thing which must be guarded against in the designing of complex modern aircraft. This instance occurred elsewhere, but the fact that it could happen serves to point up to Boeing engineers and all other designers the importance of a phase of engineering that is gaining recognition as a specialized field of its own.

This field of study is called "human engineering." It is an area of specialization concerned, not with designing humans as the name might imply, but with designing for humans, with their abilities and limitations in mind.

Of course, consideration of the human factor in aircraft operation has not appeared suddenly on the scene, like a late comer to the party. It has been around for half a century now, masquerading under the name of "common-sense design." It has achieved new emphasis and individual stature, however, since the human end of the man-and-machine combination has begun to fall behind the rapid progress in aircraft performance. In this postwar age, for the first time, man has often become the limiting factor in the machine's ability—not man the designer, but man the airman.

Help for Airmen

Human engineering, whether by that name or another, has long helped the airman keep pace. It has recognized his needs and filled them with such aids as pressurized cabins, radar gunsights, ejection seats, more efficient navigation systems, foolproof control arrangements. With increases in speeds and operating altitudes, the problem of filling his needs has become progressively more difficult.

At the 250 miles per hour that a World War II bomber traveled, for example, today's electronic navigation aids would have been an unnecessary luxury. But at today's speeds, more than double the World War II rate, a bomber's position changes much more quickly. The navigator, working every bit as hard as the World War II navigator, must have a good deal of help to perform the necessary duties within the available time, if he is to keep the airplane on the shortest course to the target and know exactly where he is along that course. Hence the complex K-2 bombing and navigation system in the B-47 bomber.

"To err is human," says E. W. Norris, head of the airworthiness unit of Boeing engineering, "but to err in aircraft operation may be unforgiveable. Although pilot error is the reported cause of over 50 per cent of all aircraft accidents, the designer has found that many of these accidents could be avoided by more accurately anticipating pilot behavior under actual operation conditions. Human engineering seeks to give the designer specialized information and knowledge to aid him in reducing the probability of pilot error."

A New Phase of Engineering Is Becoming Vital in Aircraft Design: Human Engineering. It Prevents Things Like Giving a Man 90 Minutes Work Every Hour, as Actually Happened.

Prevention of error involves designing for efficiency in the crew's work area. Of course, methods study specialists and industrial engineers will say such things as design of work areas for efficiency are old stuff. They will point out that the most productive firms in industry have used such "human engineering" in planning factory schedules

...man....

and production flow. Even rest periods are designed to permit each man to do his best consistently. Industry for many years has been aware of the human end of the operation.

Working conditions and working areas for air crewmen are not new considerations either. Experience gained in the utilizing of crew positions for one airplane has been passed on to the next design, and an empire of information has been built up.

Old in Principle

"Didn't we take the pilot out of the rain?" asks Lyle Pierce, a thirty-year man on the Boeing engineering staff and project engineer for the B-47B. "Didn't we give him trim tabs so he wouldn't have to fight the controls from takeoff to landing? Didn't we put throttles and switches and controls within reach? We've been 'human engineering' since the first Boeing airplane, the B & W 1, first flew."

Then he goes on to say that, as each improvement in aircraft performance has required more learning, there gradually has evolved a difference between the early "common-sense design" school of human-engineering thought and today's view of human-engineering problems.

"Today we're replacing the expert opinion with findings based on scientific methods and experiments," he says.

Responsibility for human engineering in Boeing airplanes lies with the preliminary design people and engineers on the design project. Their work is expected to exhibit modern-day common-sense design, which takes into account the results of performance tests carried out by physiologists, psychologists and medical men, who study the limitations of the human bodv and mind.

The design engineers must, in laying out the structure, take into account the latest findings on the maximum effective reach of the tall pilot and the short one, as determined by actual experiment. Thus all controls can be easily reached.

(Continued on Page 13)

PILOT OPINION: This is an aspect of "human engineering"—incorporation of the pilot, or operational, viewpoint in aircraft design and development. Participation in this phase of the industry is a growing part of ALPA's Air Safety Program.

ABOVE: The ALPA Jet Transport Technical Team at the Boeing Company. Standing (l. to r.): John Fornasero, BAC-Flight Test; Dan Downey, BAC-Power Plant Engineer; L. H. Mouden, (ALPA); Gene Norris, BAC-Airworthiness Engineer; G. C. Cook, (ALPA); Milt Heinemann, BAC Preliminary Design; Bill Taylor, BAC-Domestic Sales Manager; Ed Bracher-BAC B-47 Test Pilot; Joe Sutter, BAC-Aerodynamics; Jerry Kane-BAC Asst. Manager-Domestic Sales. Sitting: C. F. Eck, H. G. Portman, V. H. Brown, D. L. Phillips, and J. C. Burn, all of ALPA.

BELOW: The ALPA DC-7 Evaluation Committee studies performance of Douglas' new transport at the company's plant. (l. to r.): A. W. Stainback, H. G. Portman, C. F. Eck, T. G. Linnert, C. M. Hefner, V. H. Brown, C. H. Ruby, C. J. Ingram, L. O. Meredith, J. H. Durham, all of ALPA; and Larry Peyton, Douglas Flight Test.

Camera

The joint Pioneer - Continental MEC meets at the Home Office to discuss merger problems. An agreement to merge between Continental and Pioneer is before the CAB for approval. The CAB itself, however, has instituted an investigation of whether a Braniff-Continental merger would not be more in the public interest. Prehearing conferences on both of these cases are set for January 28 in Washington D.C.

The PAA System Safety Committee holds its first annual meeting. Front row (l. to r.): Bill Masland, ALPA Vice-President, Reg. I; Lew Jack, System Safety Chairman; Jerry Lederer, Flight Safety Foundation. Back row (l. to r.): Bill Moss, ALPA Performance Committee, Jim Roberts, Bill Ewing, Art Valla, Fred Koepke, Art Peters and L. Rea. Not in picture but at meeting were M. Van Winkle and Scott Flower. (See story, page 15).

ALPA was well-represented in commemoration of the Golden Jubilee of Powered Flight. Photo was taken at ceremonies at which Illinois Governor Stratton presented Capt. Benjamin B. Lipsner, First Superintendent of U. S. Air Mail, with Award of Merit and Citation. Bottom row (l. to r.): Clarence N. Sayen, Pres., ALPA; Gen. Otto Kerner; Gen. Robert M. Woodward; Capt. Benjamin B. Lipsner; Pierre de Aronzarena, Air France; Col. Sid. T. Holzman; Col. Howard T. Markey, Com. Aviation Post, American Legion. Second row: Max Berliner; Commander Thomas S. Chuhak, U.S.N.; Capt. Milton Dunlap, C.A.P.; Benjamin Fohrman; Irving Breakstone, State Commander, American Legion; Col. John F. Tyrell, P.C., Aviation Post, A.L.; Sid Townsend, P.C., Aviation Post, A.L. Top row: Major General J. L. Homer, U.S.A.; C. F. Eck and T. G. Linnert, ALPA; Edward Freeman, Director P.O.D. Air Transport; Capt. H. E. Rice, Military Order World Wars; Carl A. Schroeder, Postmaster, Chicago; Edwin Bracher, Boeing Test Pilot.

The first meeting of the President's Advisory Retirement Committee explores pilot retirement. Seated (l. to r.): F. A. Spencer; S. J. Devine. Standing (l. to r.): W. W. Anderson; D. R. Bucklin; H. G. Evans; D. B. Kuhn; R. L. Oakman.

What's Ahead in Civil Aviation?

Being the Newest Transportation Medium and a National Defense Asset, Government's Interest in Air Lines Is Strong.

By Robert B. Murray, Jr.
Under-Secretary of Commerce

The average American citizen, I am sure, believes that the world is now well advanced into the "air age," and that this country is the leader in this latest of man's achievements in transportation.

He is, for the most part, correct in his assumption. Yet I doubt if he is as well informed on the nature and status of his Government's participation in civil air transport and of the many problems in this field with which we must come to grips if we are to carry out the present Administration's desire to encourage private initiative, to minimize Government interference in business, and to reduce Federal expenditures.

It has long been the economic policy of this country to give selected industries some Government assistance during the early stages of their development. In general, that theory has been applied to each of the great transportation industries in our history. American aviation, as the newest of them, with its tremendous implications of national security and economic development, has continued to be of great concern to the Federal government.

Major Questions Raised

The office of the Under Secretary of Commerce for Transportation, acting for the Secretary of Commerce on transportation matters, is charged with coordinating the various transportation programs of the Department. We are expected, within the limits of our authority, to exercise leadership in the overall coordination of transportation activities in the Executive Branch of the Government, and to work toward a sound national transportation policy.

It thus becomes our responsibility to evaluate the amount and nature of all Government aid to the transportation industries, including aviation.

Specifically, major questions have been raised concerning the continuance of the air mail subsidy. These questions relate to such matters as the need, amount, coverage, and duration of subsidy payments to air carriers.

We feel that the answer to the questions now raised rests in large part on the extent to which air carriers receiving subsidy have progressed toward economic maturity.

The question of whether the air transportation industry, or certain segments of it, have reached maturity, is vital in any assessment of the need for Federal subsidies. For, it is clear that if maturity has been reached, there should no longer be need for direct financial assistance. Certain indicators of maturity are pertinent—such as physical growth, competitive ability, industry profits, and financial development, and the trend in costs to the Government in the form of subsidies.

Remarkable Growth

With respect to the first of these indicators, it is evident that the domestic trunk airlines have experienced a remarkable physical growth since the passage of the Civil Aeronautics Act in 1938. In that year certificated trunk-line routes amounted to only 39,000 miles compared with 131,000 for 1952. The frequency of service demanded by the public has increased at an even faster rate. In 1938 the domestic trunk airlines in the United States performed 480 million passenger-miles. In 1952 this figure was 25 times as great—over 12 billion passenger-miles. Express and freight ton-miles, excluding mails carried, increased from only two million to nearly 160 million in the interval from 1938 to 1952.

The adoption of the term ton-mile in aviation terminology, in itself, is a symbolic measure of maturity. As late as 1945 air freight was measured in pound-miles. A substantial part of this growth has occurred very recently. For example, revenue passenger-miles have doubled since 1947. Express and freight ton-miles have increased nearly two and one-half times and the available revenue ton-mile capacity for freight, mail and passengers has doubled, increasing from about 1.2 billion in 1947 to 2.4 billion in 1952.

The number of planes in service affords another measure of airline capacity. Planes in trunk-line service increased over 300 per cent in the period 1938 to 1952. In the former year the trunk lines had 236 planes, almost all two-engined craft. At the close of 1952 there were more than 900 planes in this service, 426 of them four-engined planes. Needless to say the technical efficiency, capacity, comfort, and safety of the 1952 planes were far in excess of their prewar counterparts.

The physical growth of the domestic trunk airlines has also been paralleled by a rapidly improving competitive ability. In fact they have obtained a significant part of the total for-hire passenger market. At present the airline passenger-miles performed slightly exceeds first-class rail passenger-miles; whereas in 1947 only 33 per cent of the combined first-class passenger business was by air. Domestic scheduled airlines in 1952 performed 19 per cent of all intercity for-hire passengers, compared to 8 per cent in 1947 and 1.2 per cent in 1938.

Toward Self-Sufficiency

The financial development of the domestic trunk airlines as a group since 1938, further demonstrates their progress toward economic self-sufficiency. Total assets of the trunk airlines in-

About the Article

There is little doubt that some governmental air policy changes will be blowing in on the shifting political winds. There is likewise little doubt that such changes are bound to, in some way, affect the pilots. This article, the text of a recent speech by the Honorable Robert B. Murray, Jr., Under Secretary for Transportation of the U. S. Dept. of Commerce, reflects the viewpoint of the new administration. It is printed as a barometer of what may possibly be expected in future policy.

creased from $37 million in 1938 to over $775 million in 1952, a twenty-fold increase. Net worth has increased from $27 million in 1938 to $368 million in 1952. Unappropriated earned surplus has since 1938 increased from a negative six million dollars to a black figure of $130 million. Moreover, in an industry where equipment is subject to rapid technological obsolescence, most trunk airlines have been able to finance their postwar expansion in the open money market.

In addition to their ability to secure needed loan capital to replenish their fleets and other facilities, a trend of profits has developed in line with the profits in other industries throughout the economy.

In 1952 trunk airline profits amounted to $53 million. More liberal dividends likewise have been paid by the airlines in recent years. In 1952, for example, they paid over $17 million in dividends, or 11.9 per cent of the book value of the capital stock. Profits after taxes in the trunk airline industry approached 15 per cent of net worth and nearly 7 per cent of total assets in the industry. Of course it is generally known that all domestic trunk airlines are not in as favorable an individual position as indicated by the average figures.

However, as a result of the generally improved position of domestic trunk airlines, subsidies paid them have been reduced substantially. Although $18.9 millions were received by them in fiscal 1951, it is estimated by the Civil Aeronautics Board that only $3.6 million will be paid in 1955.

This experience of the domestic trunk airlines indicates that the age of an industry alone is not a reliable measure of its maturity. In the case of aviation, the various aids extended by the Federal government have greatly accelerated progress toward economic self-sufficiency. To this extent the objectives of the 1938 Act have been largely realized.

Unbalanced Route Structure

However, making all domestic aviation self-sufficient has been complicated by the development of an unbalanced route structure. Such was not the intention of the framers of the Civil Aeronautics Act, whose expressed objective was to avoid the defects experienced in the growth of earlier forms of transportation.

The presence of weak and strong air carriers 15 years after the passage of the Act is a matter of considerable concern to all those interested in the future of aviation. The CAB has attempted to follow its mandates regarding administration of mail payments, as laid down in the Act. However, this task has been made more difficult by the inheritance of an initial imbalance at the time of the passage of the Act.

The results thus far recorded with the feeder experiment, for example, are in sharp contrast to the relative success achieved in bringing the domestic trunk-lines to a point of freedom from air mail subsidy. In the case of this group of carriers the trend is in the opposite direction. Total subsidy payments for these experimental carriers had already reached a total of 19 million in 1952, rose to $22 million in 1953 and CAB estimates that these costs will climb to $24 million in 1954-55. The CAB has further estimated that subsidy requirements for the three certificated helicopter lines will aggregate $2.6 million in fiscal 1954 and $2.9 million in fiscal 1955.

Up to this point we have concentrated on the question of subsidy requirements for the domestic civil air transport industry. The problem of government support is somewhat different in the international field. In this area, Government aid must take account of growing foreign competition and the need for developing an international route position consistent with the requirements of national interest and security.

The CAB has estimated that total subsidy payments for fiscal 1953 will approximate $75 million, of which about 60 per cent, or $40 million will be paid to the international airlines. For 1954 and 1955 the CAB estimates indicate that the subsidy needs of these carriers will continue to rise—to approximately $43 million.

Conclusions

From this brief examination of the self-sufficiency of the airlines and the need for continuing aids in the interest of commerce, national defense and the postal service several general conclusions seem warranted. First, by application of relevant tests of an industry's position it appears that most of the domestic trunk-lines are now eligible for membership in the fraternity of self-supporting transportation agencies. Consequently, the federal aids which speeded their growth from infancy to maturity should be withdrawn in an orderly manner and in accordance with a prearranged schedule. In this process full recognition must be given to the fact that the airmail subsidies granted by the Civil Aeronautics Board are only a part of the overall Federal assistance to aviation. This has included as you well know grants-in-aid for airport construction as well as the construction, maintenance, and operation of the Federal airways system. Various elements of Federal assistance are inter-related, since, for example, certification of additional routes would augment total requirements for air terminals and air navigation and traffic control facilities as well as the possible increase of airmail subsidy payments.

The second major conclusion indicated from our review of the aviation problem is that the mounting Federal subsidy cost associated with the feeder line experiment and the international airlines must be subjected to critical reappraisal. These payments have been mounting steadily in recent years with every indication that under present policies the outlays will continue to rise. A major responsibility for finding some acceptable solution for this problem rests squarely on the Department of Commerce. Under the terms of Reorganization Plan No. 21 and other basic statutes we are charged not only with specific duties in the promotion of aviation but with an overall responsibility for developing a sound and coordinated national transportation policy. It is not possible to develop such a policy without being concerned with broad fundamental issues having to do with each individual form of transportation. We must determine the Federal Government's role and relative interest in and responsibility for each transportation activity, have some idea of the cost involved and strive for a proper division of the expense. Moreover we are obligated in line with general administration policy to seek out every possible budgetary economy in the Government's performance of its transportation activities.

To this end my office has initiated a series of intensive studies covering the major transportation responsibilities and policies of the Federal Government. In the field of air transportation these inquiries will seek to determine solution to such problems as:

1. General question of route certification both domestic and international.
2. User charges for airways.
3. Federal role in airport development.
4. The emerging competition between the scheduled and non-scheduled carriers.

In the exploration of these complex issues we shall collaborate closely with the Civil Aeronautics Board.

The Roughest Year on Record

At the dawn of a new year, as battered and bewildered men everywhere complete their usual inventories of events just past, indulging themselves in the reborn hopes which are indigenous to the season, we dwell briefly in retrospect, as is our custom with the passing of each succeeding annum. It is always interesting—though sometimes painful—to look backward at the calendar to see what it has brought us as we add another year to our lives.

1953 will be remembered by men in aviation for many reasons. Some of the more salient events of the year were the introduction of the DC-7 and the Super Constellation, bringing the long-awaited miracle of coast-to-coast non-stop service; the first commercial airline flight across the North Pole from California to Europe; the long-delayed christening of the helicopter as a full-fledged younger brother of the ever-growing airline family; aviation's golden anniversary and the deserving accolades it brought to the Wrights; and the premature burial of the "flying saucers" by one of America's leading scientists, followed by their hasty disinterment by less tractable of the faithful than your apostate scribe.

All these events have come and gone and become aviation history. Even though the dates may soon be forgotten by most of us in the tempo of this mad life, each has its place in the mosaic pattern that makes aviation the most fascinating of careers.

But when these events are no longer called to mind there will still linger in many a pilot's memory a small niche that will not allow him to forget it was the year of 1953 that brought him the most difficult year of weather flying his diary has yet recorded. For most of the past 12 months he has been at constant odds with the elements, many of his flights forcing him to utilize all the tricks in his reportoire to complete his appointed rounds. On occasions his ingenuity and resourcefulness have been taxed to the utmost and many are the gray hairs which in years to come will properly be labelled as vintage of 1953. The golden anniversary of flight has been the worst year of weather the airline pilot has yet flown.

Ageless veterans, long since sporting completely gray coiffures, men with more than a quarter of a century of sitting at the controls of airliners, are of one mind when they discuss the weather of the year just past. Almost without exception they are quick to pronounce it the worst in their memory. Many young pilots, just beginning hopeful careers, have shaken their heads in disillusionment and regretfully contemplated the despised job they left behind to come and do this. A few of the fainter hearted have even thrown in the towel, deciding an airline pilot's life is not the bed of roses that Hollywood and its imaginative writers are always ready to depict it.

Following no set pattern but contenting himself to hit hither and yon, Jupiter Pluvius was off in January to an early and wrathful start. Strong cyclonic systems with high winds and turbulent storms struck many parts of the country. February saw the genesis and development of an unbelievably violent storm center in the Gulf of Mexico. Veterans of many years in the Weather Bureau could recall no parallel for its speed across the water. It fell to National Airlines to have the tragic misfortune to encounter this raving giant off Mobile with a heavily-laden DC-6 which went to pieces in mid-air, a victim of this unforecast storm's fury. Pilots who flew through it before and after the accident—probably not hitting the exact center—described it as a vicious storm, nearly impossible to negotiate.

With each succeeding week new reports from dishevelled and disenchanted pilots came in, bearing witness to the fact that this was indeed an unusual spring. American, United, Eastern, Northwest, Braniff—everybody reported more than the usual disturbances accompanying the Ides of March. Tornadoes were a dime a dozen, striking everywhere. There are those who believe that better reporting procedures and more facilities accounted for the alarming rise in the incidence of these terrifying twisters but the airline pilots who flew the Southern and Great Plains states believe it was a record year because there were more of these devastating dealers of death and destruction to report. On one day, June 7, there were 15 tornadoes reported in Nebraska and Iowa alone.

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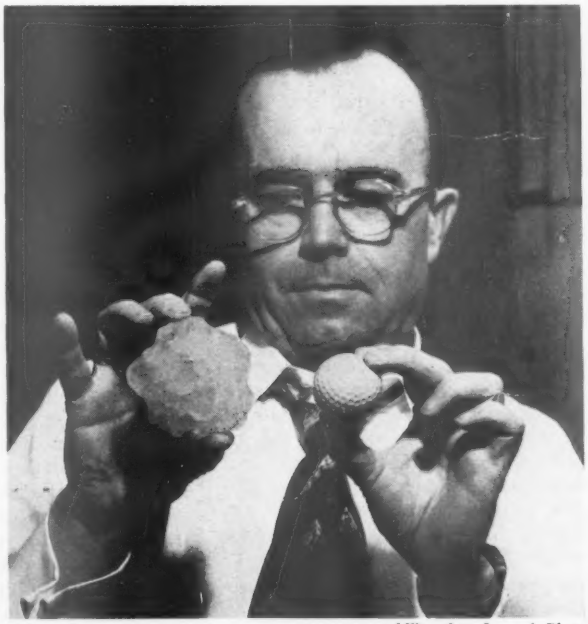

—Milwaukee Journal Photo

Your reporter has more than academic interest in setting down these words because it was on the night of May 25 that I hit the worst turbulence of my flying career. It happened on the south leg of Milwaukee in a Constellation *at 155 m.p.h.* as we began an instrument approach. According to pilots who have flown all airline types, a Connie rides turbulence as well as any ship in airline service. The three busy boys who were in the business end of our Connie came out of this violent turbulence—sometimes it was sidewise—with a high regard for the rugged strength of the big fork-tailed bird. Hailstones as big as baseballs were falling in the suburbs of Milwaukee and a *30-degree temperature difference existed between us and the ground, 2800 feet below.* A picture of a Milwaukee resident comparing one of the hailstones with a golf ball accompanies this article. A golf ball is 1.69 inches in diameter.

A Curtiss C-46 is considered a reasonably strong airplane and I have no prior recollection of a case where one of these ships shed its wings. But a Resort Airlines crew (non-sked), ferrying an empty Commando from Chicago to Cheyenne on May 22 encountered a vicious line squall in Iowa and the big twin-engined plane broke up while at the mercy of the storm.

Of all the untold numbers of incidents in turbulence during the year, probably none will equal the incredible experience of Capital's Gordon Speer, who related his story some time ago in a matter-of-fact style in Technical Talk for Pilots. You will remember Capt. Speer as the pilot who was put on his back four times in succession with 16 passengers aboard in a DC-3 over West Virginia in early summer. On his last recovery he barely missed the ground. Although numerous theories have been advanced, to date nobody has been able to figure out definitely what kind of churning air currents were at work on the ancient but sturdy veteran of yesteryear to cause the aerodynamic epilepsy which seized it. Many pilots think it encountered incipient tornado conditions.

The experience of PAA's Capt. J. R. Maxwell over the Gulf near Galveston is equally baffling. While it hardly seems likely that he could have flown a pressurized Constellation through the top of a tornado vortex without the cabin exploding from the additional 10 inches of atmospheric differential reported by his altimeter (discounting completely the terrific violence present inside the funnel cloud), the fact remains that something freakish—strange and frightening and unknown—was encountered by the flight.

Even the moon went crazy. Astronomers at the Hayden Planetarium attributed the high tides of the November East Coast storm—worst since 1938—to a new moon being on the same side of the earth as the sun, throwing the terrestrial gravity out of whack and into conspiracy with the near-hurricane velocity of the northeast winds. The surprise storm's devastation in New York and Connecticut was only exceeded by the consternation it caused the Weather Bureau. For the first time in its history, the Bureau, under orders of Dr. F. W. Reichelderfer, instituted a searching investigation in an effort to learn how seasoned meteorologists were caught flat-footed and without a forecast of the storm.

A 12-day stagnation of a heavily contaminated high pressure system over the East in August was described by the Weather Bureau as not only record breaking, but "phenomenal." Even Pittsburgh—the erstwhile smoke champion of America—must dig deep into records of yore to match New York's week-long smog curse of November. And no December tornado has ever been recorded that equalled in viciousness and devastation the fearsome twister that struck Vicksburg, Miss., shortly before the year's end. December is not a tornado month but it added Vicksburg to already stricken Waco, Flint and Worcester as the four most damaging tornadoes in American weather history.

Whatever the cause of all the phenomenal weather of the past 12 months, whether it was sun spots, melting polar caps, nuclear fission or atomic fusion—maybe the Russians have invented an ozone trap—the fact remains the airlines have had a wonderful year. More people flew in 1953 than ever before; we consistently flew more weather than ever before; yet we have come very close to setting a new safety record—less than one fatality for each 200 million passenger miles. We are justly proud of this great achievement. But we are not content to rest on our laurels. There is still much to be desired and our struggle to attain it will go right on.

Our resolution for the New Year should be to strive always to keep safety paramount in our minds, subordinating everything else to it. We shall not rest until airline travel is recognized as the safest form of transportation in the world. Our goal is not far away and *it can be reached!*

While it is customary to toast the old year as we salute the arrival of the new year, this is one occasion many of us were willing to dispense with this time.

1953 is gone and we are glad.

The Unforgotten Man . . .

(Continued from Page 7)

Experiments also show that fatigue in pilots increases their tendency to neglect the instruments out of their immediate range of attention. For that reason, design engineers must make sure that important instruments are directly in the view of the pilots, not in the area of peripheral vision. Designers must also follow such principles of human engineering as making control movements, wherever possible, parallel the axis of the motion they affect: pushing the throttles *forward* to increase speed, or moving the undercarriage retraction lever *upward* to raise the airplane's wheels.

Instead of depending solely on their own opinions, the modern-day designers seek out the latest studies of experts on such seemingly simple subjects as the correct type of lighting for the radar operator's position, or the correct height for the navigator's table.

There's a best way to design any place in which a human will work, and everything a human will operate. The best way should be applied even to the elementary things, things easy to overlook. For instance, scientific experiments have shown that, for easiest reading with the least possibility of error, numerals on counters should be one-sixth as thick as they are high. Engineers must see that this best way is designed into aircraft.

The crew positions must be designed to permit the crew to function as a team that will be able to operate the airplane at maximum efficiency with the equipment specified. The engineers must make sure, through design, that the airplane's full potential will be realized—that the airplane will not be penalized by the human limitations of the crew.

But design engineers are human, too. Each specializes in a certain phase of design—controls, perhaps, or seat installations, window and windshields, pressurization systems—what have you. Though they realize the importance of

(Please Turn Page)

human engineering, design engineers don't claim to be specialists in that field. Nor can they be sure to notice all shortcomings of their designs with regard to human engineering.

It is necessary, therefore, to consult others who are primarily concerned with the abilities and limitations of the human operator. For this purpose Boeing has established a panel of experts to follow the development of aircraft and advise design personnel regarding special human-engineering considerations. The newly-created panel reviews new developments in human-engineering research, literature and actual operating experience and considers application of the new developments to Boeing's operation. It also participates in and applies its experience to the evaluation of cockpits.

The panel includes the Boeing medical director, chief of flight test, a representative of the project staff, preliminary design staff engineer and chief of the service analysis unit, under the chairmanship of the airworthiness staff engineer. The group maintains contact with such outside activities as the ARDC, directorate of human factors, directorate of flight safety research, Civil Aeronautics Administration, Aeromedical Association, Flight Safety Foundation and the Navy's human-engineering specialists. It obtains the advice and recommendations from these sources and advises them regarding basic human-engineering data needed to develop proper solutions to Boeing's own design problems.

Design Tips

The airworthiness unit, under the panel's direction, maintains an up-to-date reference file on human-engineering research projects, literature, design data and opinion of competent authorities in the field. It publicizes the importance of human-engineering considerations by means of "Design Tips" based on actual experience, by encouraging flight-simulator training and actual flight-deck observation for designers, and by individual contact with those responsible for original design work affecting human occupant accommodations.

"Investigations and experiments are being carried out every day," says airworthiness engineer Peter Hogue. "Advances in aeronautics mean more human-engineering problems to be solved, more tests to be conducted."

Among the most recent tests of human-engineering applications were simulated flights of the future carried out within the past month at Boeing's Seattle factory. The "airplane" used was a wood-and-metal full-scale model of the production B-52, the airplane's mockup.

In the crew stations, accurate to the final detail, experienced Strategic Air Command air crews, ranging in size from a six-foot-three-inch pilot to a five-foot-six-inch radio operator, carried out the duties they would normally perform on an operational mission. Throughout these tests the crewmen were observed by Boeing engineers, scientists from the human factors directorate of the Air Research and Development Command, and flight surgeons from the Aero-Medical Laboratory. For most of a week the tests went on from morning until night, with crewmen in full flight gear carrying out their duties.

What of Future?

When the four-day conference had ended, the SAC crews had shown the human-engineering specialists what they wanted to know. Through their actions, the flyers had pointed up anything in cockpit or crew stations that required changing. In the same manner, they had assured the scientists that they and other air crews would be able to carry out their assigned duties safely and efficiently, and that they would be able to cope with any emergencies aloft. They had also helped add to the background of knowledge on which the human side of new airplane designs will be based.

"But what about the distant future, when the flying duties of humans are taken over by vacuum tubes and gadgets?" comes the inevitable question.

The rule will continue to be: Use the machine to relieve the man of as many routine jobs as possible, but use the man to supply the judgments and the flexibility of which machines are incapable.

The human being is not going to be replaced. Even the flight of a guided missile will forever depend on accurate construction of the missile by humans, and settings, checking and launching operations carried out by humans.

Engineers see no end in sight for the application of human engineering as long as machines exist and humans continue to operate them.

ALPA'S Organization and Operation

(Continued from Page 5)

mum hours of employment, and uniform principles of seniority for the air line piloting profession, and to seek the adoption and perpetuation of these.

Legal and Conciliation: To represent and safeguard the legal rights, individually and collectively, of the Association members.

Engineering and Air Safety: To safeguard the safety of scheduled air transportation in recognition of the high degree of public trust, confidence and responsibility placed on members of the Air Line Pilots Association.

Publicity and Public Relations: To disseminate the news in furthering an alert and well informed membership and general public on Association activities.

Statistical and Research: To furnish Association representatives with research information and data necessary for proper representation.

Washington Representative: To urge, support, and sponsor the passage of legislation and regulations affecting air line pilots which will improve, protect, and increase the safety of their working conditions.

Regional Offices: To promote and co-ordinate liaison between system-wide and Association-wide activities.

The Administrative division is composed of the "housekeeping" departments at the Home Office and serves the Executive and Representative divisions in relieving them from detail. These departments and their objectives are:

Council Co-ordination: To further inter-Association co-ordination and activities with the organization of additional air lines and Local Councils as necessary to promote the interests of the Association membership.

Accounting: To collect initiation fees, dues and assessments necessary to provide the funds with which to carry on the business and objectives of the Association, including the payment of all expenses, and to establish an ample reserve fund for the current and future protection of its members.

Purchasing: To select and purchase all supplies and equipment necessary for Association administration.

Personnel: To interview, employ and supervise Association salaried personnel for all departments.

Membership and Membership Records: To maintain the Association records so as to show the membership status, individally and collectively, of all members.

Mimeograph and Mailing: To mimeograph, collate, address and forward all correspondence so requested.

Central Files: To maintain and file the Association records.

Credit Union: To promote savings and provide loan facilities for Association members.

Mutual Aid: To provide financial assistance during a limited period of physical disability.

Loss of License: To provide an income for Association members who have been deprived of their Pilot Certificate and are thereby unable to continue gainful pilot employment.

Let's see how this all fits together in a continuous pattern by the Home Office administering and implementing policy which originated in the field.

A current Association By-Law change, much in the limelight recently, that illustrates ALPA's Organizational Structure, is that of the former Executive Inactive member category. The Home Office has received letters protesting this change in which the irate writer has accused the President or the Accounting Department with the actual By-Law Amendment! This particular membership amendment originated in its basic form on United Airlines and has been discussed in all the organizational steps including the 11th and 12th Board of Director Conventions. The last change (at least from an administrative viewpoint) was approved by the Board of Directors on the recommendation of the Executive Committee. Thus, this change in membership status was originated by one air line, was considered by all air lines through the Board of Directors (since only they can amend the By-Laws) and was recommended in its current form by the Executive Committee who referred it to the Board of Directors by mail ballot for approval. The Home Office did not, has not, and cannot make any changes in the former Executive Inactive membership category. But it has conscientiously performed the administrative function assigned to it by the Board of Directors in carrying out this policy.

Another By-Law mandate that is near and dear to each member's wallet and an example of how ALPA's Organizational Structure works is the payment of the quarterly dues and the annual dues adjustment. The Treasurer and his staff are charged with administering the financial affairs of the Association. In doing this, they are guided by the By-Laws in collecting the dues and payment of expenses. By far, the greatest headache is the annual dues adjustment and verification of income. Each of the 9,000 members' income must be verified either by:

(1) Forwarding their annual W-2 statement of income to the Bookkeeping Department, or

(2) their Local Council Chairman verifying that the income reported on the dues adjustment card is correct, or

(3) their Local Council Finance Chairman so verifying.

Your Treasurer and the Accounting Department have no alternative but to insist that each member's dues be verified in addition to submitting the dues adjustment card. Your cooperation will make this annual routine a bookkeeping entry and not the time-consuming and costly matter it is now.

Maintaining members' correct addresses and Local Council records is a daily-changing routine. Your Association Secretary and his staff have perfected their administration to the point where all records are changed with dispatch. However, they cannot anticipate your move from Tulsa to New York, nor can they decipher your fancy penmanship. All they ask is that you drop them a post card, legibly written, informing them of your membership changes. They do welcome letters from your wife, but when Mrs. Mary Smith writes about her husband, it will help if Mary will mention that her husband is George A. Smith, Local Council 73, National Airlines, Miami.

Your Home Office and its personnel are proud to be a small part of ALPA and endeavor to do their job as you have instructed them. They can only do as well as the calibre and formulation of the goals given them permit. So the next time you ask about Association policy for which none exists, and a staff member replies, "That is a good question—what is it?", he is not trying to be humorous—he wants to know, as you are the people who formulate it.

I hope I have conveyed that ALPA is not some mysterious organization, but is simply an Association of individual pilot members banded together by air lines into a Congress that works for the good of all with the individual retaining final authority in his Local Council. Without "you" there is no Local Council, no Master Executive Council, no Executive Board, no Executive Committee, no Board of Directors, no Home Office. Who are you? You are ALPA.

PAA Pilots Meet, Safety Gains

The first Annual Meeting of PAA's System Safety Committee was held in New York November 30 - Dec. 2.

Capt. L. N. Jack, Chairman of the Safety Committee, pointed out that it was "the first time in the history of PAA that its pilot representatives have met formally, and only, in the interests of safety—the corner-stone of the industry and the piloting profession's primary responsibility."

He outlined the duties and responsibilities of the Committee as:

(1) To handle all safety matters affecting all PAA pilots at all bases; (2) To advise PAA's MEC on these matters; (3) When ALPA policy is established, the chairman can represent the pilots of the airline directly with the agency. He will keep councils informed; (4) To coordinate with headquarters on matters of Airline and National Scope.

A highlight was the adoption of a nine-plank safety platform:

- "Objective and Constructive" is our theme.
- We hold to the principle of "what's right—not who."
- We hold that our responsibility demands vigilance against lowering safety standards.
- We hold that reporting matters detrimental to safety to be corollary to vigilance above.
- We pledge an active and continuing effort in keeping our own house in order.
- We oppose the unilateral approach in solving safety problems where pilot opinion is not solicited.
- We solicit the invitation to serve.
- We hold that the "burden of proof" in proving an operation or condition to be safe to be other than ours, rather than that it is ours to prove it unsafe.
- We hold that the foregoing planks in this program will contribute much toward the desired "Prevention" of aircraft accidents—or incidents, thus toward the elimination of the undesired "Investigation."

ALPA Extended Disability Coverage

QUESTIONS AND ANSWERS:

1. Q. Must a pilot actually lose his license to qualify for benefits?
   A. No. "Loss of License" disability insurance is somewhat a misnomer because you don't have to lose your license at all to ... fits. This policy off... disability protect... are disabled ... not lost y... your lic... tected

2. Q. What a...
   A. $500 pe... months ... tionally, ... chased. ... under thi... income o... you may ... selected e... cannot c... beginning...

3. Q. How d...
   A. You q... ness o...

4. Q. How ...
   A. $12.50 ... per ye...

5. Q. Who is ...
   A. All activ... ciation ... and less ... eligible ... good ... licens... medi... Note ... to qu... unable ... tion, y... of your ... to perfo... the time ... of 14 m... mentio...

6. Q. What ...
   A. The f... receip...

7. Q. Is the ...
   A. Yes.

8. Q. Must I ...
   A. No. You ... flying a... for Airl...

9. Q. What ma... of my clai...
   A. The Underwri... your personal ph... or if the issue is not cle... right to submit the case to a U... final authority.

10. Q. Must I belong to a Mutual Aid Plan to qualify for "Loss of License" Disability Insurance?
    A. No. But it is recommended that you join a mutual aid plan so that you have a continuity of coverage.

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...eyes, ears, or heart ... cannot meet the ... covered.

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...nding or an established claim be affected by a change in the Master Contract?
A. No. Though no changes in the Master Contract are contemplated, if there should be a change, the new contract would only affect disabilities occuring after the change date.

We Pilots Are

A Phenomenal Group

But Even We

Can't Beat the Law of Averages

☆

Let's Face It

Each Year Some of Us Will Flunk Our Physicals Due To

ACCIDENTS, ILLNESS, or NATURAL DETERIORATION

We Can't Prevent That—But We Have Done Something About It

LOSS OF LICENSE DISABILITY INSURANCE

Only $12.50 Per Year

Provides $500 Per Month for 34 Months After a 14 Month Waiting Period. Income Protection During the 14 Month Period is Available Through ALPA Mutual Aid (12 Months).

5500 PILOTS HAVE ALREADY ENROLLED
(Must be the 5500 who read their mail)

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DON'T PROCRASTINATE—ENROLL NOW!!!